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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/413,993	10/07/1999	JAMES E. LANDRY	0078646-000001	2682
21839 7590 01/12/2011 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER				
SELLERS, ROBERT E				
ART UNIT		PAPER NUMBER		
1765				
NOTIFICATION DATE		DELIVERY MODE		
01/12/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/413,993

Applicant(s)

LANDRY ET AL.

Examiner

ROBERT SELLERS

Art Unit

1765

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 7 and 20-35 is/are pending in the application.
- 4a) Of the above claim(s) 26-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 7 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

This is responsive to the Request for Continued Examination and amendment filed December 15, 2010.

1. The replacement sheets for the drawing filed December 15, 2010 have been approved.
2. The objection to the specification and 35 U.S.C. 112, second paragraph, rejection advanced in the Final rejection mailed July 21, 2010 are withdrawn in response to the amendment.
3. The 35 U.S.C. 103(a) rejections over Wolf Patent No. 6,274,939; Scarlett Patent No. 6,956,079 or Neuner Patent No. 6,160,041; and over Bluem et al. Patent No. 6,214,460 are withdrawn in response to the newly amended claims requiring a combination of polyamide and polyether polyamine curing agents.

Newly submitted claims 26-35 directed to an invention that is distinct from the invention originally claimed.

4. Claims 6, 7 and 20-25 and claims 26-35 are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)).

In the instant case, the intermediate product is deemed to be useful as a coating composition and the inventions are deemed patentably distinct because there is nothing of record to show them to be obvious variants.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 26-34 are withdrawn from consideration as being directed to a non-elected invention (37 CFR 1.142(b) and MPEP § 821.03).

The specification is objected to because of the following issues:

5. The amendment to page 7 filed December 15, 2010 wherein Byk 361 is identified as an acrylic resin is broader than the specific structure of the trade name, thereby encompassing myriad species of acrylic resin not contemplated. More favorable consideration would be given to the identification of Byk 361 as an acrylated silicon flow control agent as corroborated by Scarlett in column 8, the Example 1 table, seventh entry, and more concisely denoted in claims 20, 21, 33 and 35.
6. Page 6, the second paragraph according to the amendment filed July 9, 2010 and page 15, line 10 lists Epon 8161 which is an epoxy diacrylate. Page 10, lines 14-15 discloses Epon 816. Is this trade name supposed to be Epon 8161?
7. Page 11, line 7 and page 17, lines 1 and 3 employ the term "novel" which presumptively qualifies the composition and compound, respectively. The term should be deleted since there is no evidence that such materials are new.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 7 and 20-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

8. There is no support for the acrylic "monomer" of claim 1, line 7 on page 4, line 22 and the amendment to page 6 wherein Epon 8161 is defined as a specific epoxy diacrylate resin.

9. There is no support for the b) epoxy diacrylate of claim 7 mixed with acrylate monomers on page 6, the second full paragraph according to the amendment filed July 9, 2010 which only describes an epoxy diacrylate resin.

10. There is no substantiation of the "(d) acrylated silicon flow control agent" of claims 20 and 21 (as well as withdrawn claims 33 and 35) since the sole reference is to Byk 361 on page 7, the first full paragraph according to the amendment filed December 15, 2010. More favorable consideration would be given to the definition of Byk 361 as an acrylated silicon flow control agent as suggested in previous paragraph 5.

11. Withdrawn claim 26 is not supported by page 10, lines 10-17. The claimed "cured epoxy" in line 2 and "wherein the cured epoxy is sandwiched between the first and second syntactic foam materials" in the last two lines is not substantiated by the more specific gluing of the first and second syntactic foam materials with an insulation material comprising the components.

12. There is no description of "the material under deflection of 45% maintains its structural integrity" of claim 28. Page 11, line 8 merely states: "Deflections of 45% and greater are achieved." There is no revelation as to what the deflection represents, nor any relationship with the maintenance of structural integrity.

13. Claims 7, 20 and 21 (as well as withdrawn claims 33-35) are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a derivative of epichlorohydrin and an aliphatic C₁₂-C₁₃ alcohol to reduce the viscosity on page 6, lines 8-9, does not reasonably provide enablement for "(c) a viscosity-lowering diluent" in general of claim 20 (and withdrawn claim 33).

14. The "(c) silane-treated cenosphere" of claim 7 (and withdrawn claim 34) is not enabled by page 5, lines 7-8 which specifies cenospheres surface treated with an epoxy silane adhesion promoter.

15. The (e) aluminosilicate or aluminosilicate ceramic of claims 20 and 21 (along with withdrawn claims 33 and 35) is not enabled in the absence of there designation as aluminosilicate ceramic spheres surface treated with an epoxy silane as set forth on page 5, lines 7-8.

16. The "(f) fiberglass" of claims 20 and 21 (and withdrawn claims 33 and 35) is not enabled unless "pre-treated with an epoxy silane as espoused on page 7, lines 7-8 since it is not described without the pre-treatment.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinmann et al. Patent No. 6,395,845 in view of Neuner Patent No. 6,160,041; Matsura et al. Patent No. 6,046,072.

17. Weinmann et al. (col. 2, line 58 to col. 3, line 3) is directed to a composition comprising (a) an epoxy resin such as Epon 8132 (col. 11, lines 11-24, a blend of Epon 828 diglycidyl ether of bisphenol A and Heloxy 9 alkyl C₁₂-C₁₃ glycidyl ether used in Component A on page 15 of the instant specification), (b) a liquid amine-terminated polyamide such as Epi-Cure 3164 (cols. 13-14, Table 2, utilized in Component B on page 15 of the instant specification), (c) an optional polyamine such as Jeffamine D-230 polyether polyamine (col. 6, lines 9-11 and 26-27, employed in Component B),

(d) optional fillers such as silica (col. 9, line 9), (e) optional modifying agents including acrylic monomers and/or acrylic resins (col. 9, lines 20-22) and other additives such as flow control agents and reinforcing agents (col. 9, line 31 and col. 10, lines 27 and 29).

The claimed ceramic particles are not recited among the fillers.

18. Neuner (col. 3, lines 24-33) teaches a blend containing preferably a diglycidyl ether of bisphenol A (col. 3, lines 44-45), an aliphatic glycidyl ether, a polyoxypolypropyleneamine such as Jeffamine D-230 (col. 4, lines 9-11), an intumescent powder, hollow ceramic microspheres and glass fibers (col. 2, lines 47-49).

19. It would have been obvious to combine the silica filler of Weinmann et al. with the hollow ceramic microspheres of Neuner in order to improve the compressive and tensile strengths (Neuner, col. 2, lines 10-18 and 47-58).

20. Matura et al. (col. 8, lines 56-60) reports a formulation prepared from a polyimide or polyamide, an epoxy resin such as the glycidyl ether of bisphenol A (col. 9, lines 4-5), a curing agent and fillers such as ceramic powder and glass fabric (col. 9, lines 9-14).

21. It would have been obvious to combine the silica filler of Weinmann et al. with the ceramic powder of Matura et al. in order to enhance the heat resistance (Matura et al., col. 9, lines 9-12).

Claims 7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims hereinabove, and further in view of Flynn et al. Patent No. 5,229,252.

The epoxy diacrylate resin of claim 7 and acrylated silicon flow control agent of claims 20 and 21 are not recited.

22. Flynn et al. (col. 1, lines 51-60) is directed to composition obtained from acrylic monomers, a photoinitiator, epoxy-acrylate oligomers, epoxy resins, an acidic curative, inorganic fillers such as fumed silica (col. 5, line 67 to col. 6, line 3) and flow control agents (col. 6, line 5) such as Byk 361 (cols. 6-8, Examples and 2) which is an acrylated silicon flow control agent according to Scarlett Patent No. 6,956,079 in column 8, the Example 1 table, the seventh entry.

23. It would have been obvious to use the epoxy-acrylate oligomer of Flynn et al. as the acrylic monomer of Weinmann et al. in order to improve the chemical resistance and durability (Flynn et al., col. 3, lines 21-27).

24. It would have been obvious to utilize the Byk 361 of Flynn et al. as the flow control agent of Weinmann et al. in order to optimize the flowability of the composition.

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Monday to Friday, 9:30 to 6:00

/Robert Sellers/
Primary Examiner
Art Unit 1765

rs
1/7/2011